



In the United States Patent & Trademark Office

In re Application of: *Adrian Clausell, Jirong Gu and M. Parameswara Reddy*

Serial No.: Unknown

Filed: Unknown

Title: **Methods and Reagents for Improved Cell-Based Assays**

RECEIVED

Examiner:

APR 12 2002

Art Unit:

TECH CENTER 1600/2900

RECEIVED

JAN 31 2002

Atty Dkt. No.: 3501.117

TECH CENTER 1600/2900

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

In accordance with 37 CFR §§ 1.97 and 1.56, Applicant herewith submits the following Information Disclosure Statement. A copy of all cited documents are enclosed herewith.

This Information Disclosure Statement is being submitted within 3 months of the filing date of the present application. Accordingly, no fee is required for its consideration and for the consideration of the cited documents. The cited documents are:

AA1	4,557,862 (Mangel, et al.)	AB2	5,698,411 (Lucas, et al.)
AB1	4,640,893 (Mangel, et al)	AC2	5,759,781 (Ward, et al.)
AC1	4,940,659 (Warrington, et al.)	AD2	5,976,822 (Landrum, et al)
AD1	5,070,012 (Nolan, et al.)	AE2	6,174,673 (Short, et al.)
AE1	5,238,108 (Velezis, et al.)	AA3	6,248,904 (Zhang, et al.)
AA2	5,310,687 (Bard, et al.)	AB3	6,281,021 (Egger, et al.)

AR1 Alberts, B. *et al.*, Molecular Biology of the Cell, 2nd Edition. Garland Publishing, Inc. New York, pg 704.

AS1 Alnemri, *et al.*, "Human ICE/CED-3 protease nomenclature," *Cell*, 1996 Oct 18;87(2):171.

AT1 Ashmum RA and Look AT. 1990, "Metalloprotease Activity of CD13/Aminopeptidase N on the Surface of Human Myeloid Cells," *Blood* 75: 462-469.

- AR2 Bass, D.A. *et al.* "Flow cytometric studies of oxidative product formation by neutrophils: a graded response to membrane stimulation." *J. Immunol.* 130: 1910-1917.
- AS2 Bode, W. *et al.*, 1989, "Human leukocyte and porcine pancreatic elastase: X-ray crystal structures, mechanism, substrate specificity and mechanism-based inhibitors," *Biochem.* 28: 1951-1963.
- AT2 Coates, P.M. *et al.*, 1975, "A preliminary genetic interpretation of the esterase isozymes of human tissues," *Ann. Hum. Genet. Lond.* 39: 1-20.
- AR3 Crockard, A. *et al.*, 1982, "Cytochemistry of acid hydrolases in chronic B- and T-cell leukemias," *Am. J. Clin. Pathol.* 78:437-444.
- AS3 Darzynkiewicz, Z. *et al.* "Flow cytometry in analysis of cell cycle and apoptosis," *Semin Hematol.* 2001 Apr;38(2):179-93.
- AT3 Duque, R. E., "Flow Cytometric Analysis of Lymphomas and Acute Leukemias", *Annals of the New York Academy of Sciences, Clinical Flow Cytometry*, 677, pp. 309-325 (Mar. 20, 1993).
- AR4 Ferrer-Lopez, P. *et al.*, "Heparin Inhibits Neutrophil-Induced Platelet Activation Via Cathepsin", *J. Lab Clin. Med.* 119(3), 231-239 (1992).
- AS4 Fleischer, B., 1994, "CD26: a surface protease involved in T-cell activation," *Immunol. Today.* 15: 180-184.
- AT4 Gartner, T.K. *et al.*, 1985, "The tetrapeptide analogue of the alpha chain and decapeptide analogue of the gamma chain of fibrinogen bind to different sites on the platelet fibrinogen receptor," *Blood.* 66 Suppl 1: 305a.
- AR5 Hoffmann, T. *et al.* 1993, "Dipeptidyl peptidase IV (CD 26) and aminopeptidase N (CD 13) catalyzed hydrolysis of cytokines and peptides with N-terminal cytokine sequences," *FEBS Letters.* 336: 61-64.
- AS5 Hohn, P.A. *et al.*, 1989, "Genomic organization and chromosomal localization of the human cathepsin G gene," *J. Biol. Chem.* 264: 13412-13419.
- AT5 Jongkind, J.F. *et al.*, 1986, "Detection of acid- β -galactosidase activity in viable human fibroblasts by flow cytometry," *Cytometry* 7:463-466.
- AR6 Kankaanranta, H. *et al.*, 1994, "Effects of non-steroidal anti-inflammatory drugs on polymorphonuclear leukocyte functions in vitro: focus on fenamates," *Naunyn-Schmiedeberg's Arch Pharmacol.* 350:685-691.
- AS6 Kohen, E. *et al.*, 1993, "An in situ study of beta-glucuronidase activity in normal and gaucher fibroblasts with fluorogenic probes," *Cell Biochem. and Function.* 11:167-177.

- AT6 Kojima, K. *et al.*, 1979, "A new and highly sensitive fluorescence assay for collagenase-like peptidase activity," *Anal. Biochem.* 100: 43-50.
- AR7 Leytus, S.P. *et al.*, "New class of sensitive and selective fluorogenic substrates for serine proteases," *Biochem. J.* 215:253-260 (1983).
- AS7 Li, C.Y. *et al.*, 1970, "Acid phosphatase isoenzyme in human leukocytes in normal and pathologic conditions," *J. Histochem. Cytochem.* 18:473-481.
- AT7 Look, A.T. *et al.* 1989, "Human myeloid plasma membrane glycoprotein CD13 (gp150) is identical to aminopeptidase N," *J. Clin. Invest.* 83: 1299-1307.
- AR8 McDonald, J.A. *et al.*, 1980, "Degradation of fibronectin by human leukocyte elastase," *J. Biol. Chem.* 255: 8848-8858.
- AS8 Mentlein, R. *et al.*, H. R., "Influence of Pregnancy on Dipeptidyl Peptidase IV Activity (CD26 Leukocyte Differentiation Antigen) of Circulating Lymphocytes", *Eur. J. Clin. Chem. Clin. Biochem.*, 29, 477-480 (1991).
- AT8 Mononen, *et al.*, "Enzymatic diagnosis of aspartylglycosaminuria by fluorometric assay of glycosylasparaginase in serum, plasma, or lymphocytes," *Clin. Chem* 1994 Mar; 40(3):385-8.
- AR9 Park, R.D. *et al.*, "Hypertonic sucrose inhibition of endocytic transport suggests multiple early endocytic compartments," *J. Cell Physiol.* 1988 Jun;135(3):443-450.
- AS9 Rechsteiner, M. "Osmotic lysis of pinosomes," *Methods Enzymol* 1987;149:42-48; Okada, C.Y. et al., "Introduction of macromolecules into cultured mammalian cells by osmotic lysis of pinocytic vesicles," *Cell* 1982 May;29(1):33-41.
- AT9 Riss, T.L. "Apoptosis as a biomarker in chemoprevention trials," *Urology*. 2001 Apr;57(4 Suppl 1):141-2.
- AR10 Rothe *et al.*, "Flow cytometric analysis of protease activities in vital cells," *Biol. Chem. Hoppe Seyler.* 1992 Jul; 373(7): 547-54.
- AS10 Rotman, B. *et al.*, 1963, "Fluorogenic substrates for b-D-galactosidases and phosphatases derived from fluorescein (3,6-dihydroxyfluoran) and its monomethyl ether," *Proc. Nat. Acad. Sci. USA* 50:1-6.
- AT10 Royer, G. *et al.*, "Immobilized Derivatives of Leucine Aminopeptidase and Aminopeptidase M," *J. Biol. Chem.* 248(5), 1807-1812 (1973).
- AR11 Ruiz, P. *et al.*, 1996, "Cytofluorographic evidence that thymocyte dipeptidyl peptidase IV (CD26) activity is altered with stage of ontogeny and apoptotic status," *Cytometry*. 23: 322-329.
- AS11 Sanderink, G.J. *et al.*, 1988, "Human Aminopeptidases: A Review of the Literature. *J. Clin. Chem. Clin. Biochem.* 26: 795-807.

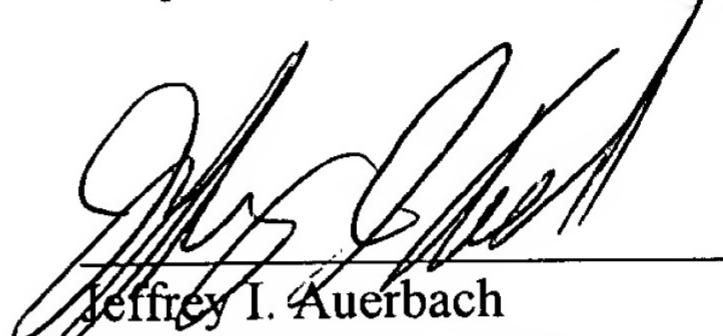
- AT11 Saraste, A. *et al.* "Morphologic and biochemical hallmarks of apoptosis," *Cardiovasc Res.* 2000 Feb;45(3):528-37.
- AR12 Saraste, A. *et al.* "Morphologic criteria and detection of apoptosis," *Herz.* 1999 May;24(3):189-95.
- AS12 Schon, E. *et al.*, "The role of dipeptidyl peptidase IV in human T lymphocyte activation. Inhibitors and antibodies against dipeptidyl peptidase IV suppress lymphocyte proliferation and immunoglobulin synthesis in vitro," *Eur. J. Immunol.* 1987 Dec;17(12):1821-6.
- AT12 Stein, R.L. *et al.* 1987, "Catalysis by human leukocyte elastase: Mechanistic insights into specificity requirements," *Biochem.* 26:1301-1305.
- AR13 Stein, R.L. *et al.* 1987, "Catalysis by human leukocyte elastase: Proton inventory as a mechanistic probe," *Biochem.* 26:1305-1314.
- AS13 Tanaka, T. *et al.*, 1993, "The costimulatory activity of the CD26 antigen requires dipeptidyl peptidase IV enzymatic activity," *Proc. Natl. Acad. Sci. USA.* 90: 4586-4590.
- AT13 Thiele, D.L. *et al.*, 1990, "Mechanism of L-leucyl-L-leucine methyl ester-mediated killing of cytotoxic lymphocytes: Dependence on a lysosomal thiol protease, dipeptidyl peptidase I, that is enriched in these cells," *Proc. Natl. Acad. Sci. USA* 87: 83-87.
- AR14 Valet *et al.*, "White cell and thrombocyte disorders. Standardized, self-learning flow cytometric list mode data classification with the CLASSIF1 program system," *Ann. NY Acad. Sci.* 1993 Mar 20;677:233-51.
- AS14 Watson, J., "Enzyme Kinetic Studies in Cell Population Using Fluorogenic Substrates and Flow Cytometric Techniques," *Cytometry*, 1(2), p. 143 (1980).
- AT14 Weiss. S.J. 1989, "Tissue destruction by neutrophils," *N. Eng. J. Med.* 320: 365-376.
- AR15 Whitlock, C.A., *et al.*, 1987. "Bone marrow stromal cell lines with lymphopoietic activity express high levels of a pre-B neoplasia-associated molecule," *Cell* 48: 1009-1021.
- AS15 Woessner, J.F. Jr., 1991, "Matrix metalloproteinases and their inhibitors in connective tissue remodeling," *FASEB J.* 5: 2145-2154.
- AT15 Wu, Q. *et al.*, 1991. "Aminopeptidase A activity of the murine B-lymphocyte differentiation antigen BP-1/6C3," *Proc. Natl. Acad. Sci. USA.* 88: 676-680.

The Examiner is requested to contact the undersigned immediately in the event that any cited document may be unavailable in order that a replacement copy can be provided.

Date:

1/12/2001

Respectfully submitted,



Jeffrey I. Auerbach
Registration No. 32,680